

AIRFLOW DISTRIBUTION SYSTEMS FOR FOOD PROCESSORS

Abstract of the Disclosure

Gas and/or air distribution systems and methods for distributing thermally and/or otherwise treated gas in a food processor by moving at least one food item over a predetermined travel path in a food processor having a food travel path comprising a moving floor and upwardly extending first and second sidewalls located on opposing sides thereof, the travel path having a corresponding first and second side portions. The methods include: (a) moving at least one food item over a predetermined travel path in a food processor having a food travel pathway comprising a moving floor and upwardly extending first and second sidewalls located on opposing sides thereof, the travel pathway having corresponding first and second side portions; (b) introducing exogenous fluid into the food processor from a plurality of inlet ports positioned proximate the first side portion of the travel pathway during the moving step to thereby treat the food; (c) exhausting fluid from the food processor from a plurality of exhaust ports positioned proximate the second side portion of the travel pathway; and (d) directing the exogenous fluid to travel from the first side portion to the second side portion over the food held on the food travel pathway during the moving step.

The distribution system may be particularly suitable for processing systems employing vertically stacked tiers and/or moving floors that advance or move the food during the processing exposure (such as heating, cooling, curing, smoking, and the like).